Getting Started with Cisco N9300 Series Smart Switches, Release 10.6(1s)

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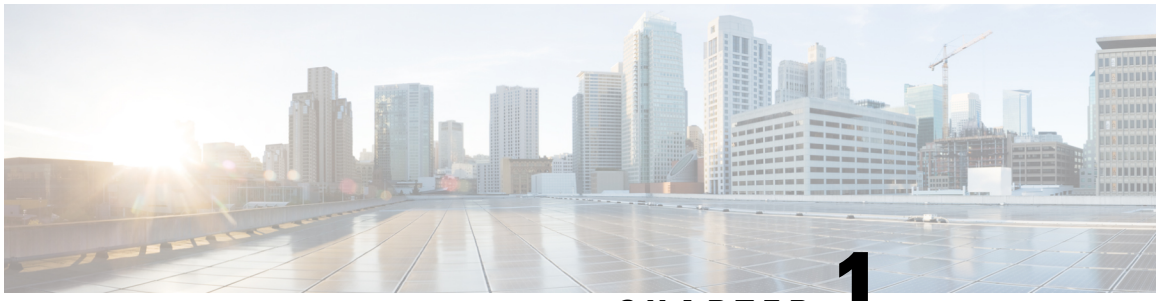
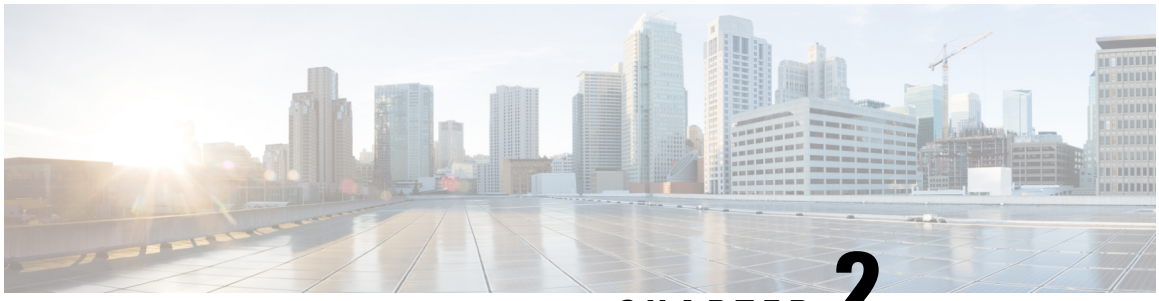


CHAPTER 1

New and Changed Information

Table 1: New and Changed Features

Feature	Description	Changed in Release	Where Documented
Introduction to Cisco N9324C-SE1U, Cisco N9348Y2C6D-SE1U switches in network-only mode	Support for Cisco N9324C-SE1U, Cisco N9348Y2C6D-SE1U switches in network-only mode	10.6(1s)	Cisco N9300 Series Smart Switches, on page 3



CHAPTER 2

Overview

This chapter introduces the Cisco N9300 Series Smart switches.

- Introduction, on page 3
- Cisco N9300 Series Smart Switches, on page 3
- Supported software features, on page 5
- Additional references, on page 6

Introduction

The Cisco N9300 Series Smart switches provide an integrated solution for scalable, secure, and efficient data center operations, by combining advanced networking and security features with hardware acceleration and software flexibility.

The Cisco N9300 Series Smart switches provide embedded security that is powered with Hypershield. The switches offer service-accelerated performance and simplify security by integrating into the network, eliminating the need for separate Layer 4 stateful firewalls.

The Cisco N93000 Series Smart switches securely segments and connects security zones within the data center, across interconnects and Cloud.

Cisco N9300 Series Smart Switches

The Cisco N9300 Series Smart switches integrate Data Processing Units (DPUs) with networking ASICs to enhance data center networking and security.

Cisco N9324C-SE1U switch

The Cisco N9324C-SE1U switch is a 1-RU solution designed to deliver high-performance networking capabilities. Its features include:

- Cisco Silicon One E100 ASIC offering high-speed connectivity and scalability
- 4 DPUs offering software-defined stateful services

In Cisco NX-OS Release 10.6(1s), the switch operates in network-only mode. The service acceleration feature is disabled.

Port specifications

Data ports

- Twenty-four 100G Ethernet QSFP28 ports

Management and console ports

- Management ports (RJ-45 or SFP)
- USB 3.0 port

Cisco N9348Y2C6D-SE1U switch

The Cisco N9348Y2C6D-SE1U switch is a 1-rack-unit (1RU), top-of-rack (ToR) fixed-port switch designed for data center environments.

In Cisco NX-OS Release 10.6(1s), the switch operates in network-only mode. The service acceleration feature is disabled.

Port Specifications

Data Ports

- Forty-eight 10G and 25G Ethernet SFP28 ports (Ports 1-48)
- Six 400G Ethernet QSFP-DD ports (Ports 51-56)
- Two 40G and 100G Ethernet QSFP28 ports (Ports 49-50)

Management and Console Ports

- management port (10/100/1000 BASE-T RJ-45)
- console port (RS-232)
- USB 3.0 port

Port speed and Breakout modes

The switches support port speeds, breakout modes and QSA adapters.

- **Port Speed**

  The configured data transmission rate of a switch port, determining the bandwidth capacity it supports on the switches.

- **Breakout Modes**

  Configuration profiles that enable a high-bandwidth port to be split into multiple lower-speed ports.

- **QSA (Quad Small Form-factor Pluggable Adapter)**

  An adapter that allows a QSFP port to support lower-speed transceivers like 1G or 10G on the switches, with the requirement that all QSAs in a port group operate at the same speed.

Cisco N9324C-SE1U switch

Native port speeds

- 40G
- 100G

Breakout modes

- 4 x 25G
- 4 x 10G
- 2 x 50G

QSA adapter

10G with QSA on the ports

Cisco N9348Y2C6D-SE1U switch

Native port speeds

- 10G
- 25G
- 40G
- 100G
- 400G

Breakout modes

- 4 x 25G
- 4 x 10G
- 2 x 50G
- 4 x 100G

QSA adapter

10G with QSA on the ports

Optics support

For list of supported optics on the Cisco N9300 Series smart switches switch, see information, see Transceiver Module (TMG) Compatibility Matrix

Supported software features

Cisco NX-OS Release 10.6(1s) introduces these software features on the Cisco N9324C-SE1U, Cisco N9348Y2C6D-SE1U switches in network-onlyu mode.

For list of supported features, see *Cisco N9300 Series Smart Switches NX-OS Feature Configuration Guide, Release 10.6(1s)*.

Additional references

Table 2: Related Documentation

For information on...	see...
Cisco N9348Y2C6D-SE1U NX-OS-Mode Switch Hardware Installation Guide	To be added
Cisco N9324C-SE1U NX-OS-Mode Switch Hardware Installation Guide	https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/hw/n9324c-se1u/nxos/cisco-nexus-9324c-se1u-nx-os-mode-switch-hardware-installation-guide.html
Cisco N9300 Series Smart Switch Data Sheet	https://www.cisco.com/c/en/us/products/collateral/switches/9300-series-smart-switches/n9300-series-smart-switch-ds.html
Cisco N9300 Series Smart Switches Troubleshooting	https://www.cisco.com/c/en/us/td/docs/switches/datacenter/n9300/troubleshooting/b-troubleshooting-n9300-smart-switches.html
Cisco Nexus 9000 Series Switches	https://www.cisco.com/en/US/products/ps13386/tsd_products_support_series_home.html